UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,495	07/11/2003	James Owen	ORACL-01363US0	5399

80548 7590 07/29/2009

Fliesler Meyer LLP
650 California Street
14th Floor
San Francisco, CA 94108

EXAMINER	
KIM, PAUL	
ART UNIT	PAPER NUMBER
2169	

MAIL DATE	DELIVERY MODE
07/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/618,495	OWEN ET AL.	
	Examiner	Art Unit	
	PAUL KIM	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,49,53,54,56-60,62 and 67-99* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,49,53,54,56-60,62 and 67-99* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/27/09, 7/15/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is responsive to the following communication: Amendment filed on 27 April 2009.

2. Claims 1-6, 49, 53-54, 56-60, 62, and 67-99 are pending and present for examination.

Response to Amendment

3. Claims 1, 53, 67, 75-82, 84, and 92-99 have been amended.

4. No claims have been cancelled.

5. No claims have been added.

Information Disclosure Statement

6. The information disclosure statements (IDS) submitted on 27 April 2009 and 15 July 2009 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **As per claims 75-82 and 92-99**, Applicant's amendment is acknowledged. Accordingly, the rejections are withdrawn.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1, 3-4, 49, 53-54, 57-58, 62, 67, 69-70, 75, 77-78, 84-85, 87-88, 92-93, and 95-96** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hotti et al (U.S. Patent No. 6,970,876, hereinafter referred to as HOTTI), filed on 8 May 2001, and issued on 29 November 2005, in view of Golshani et al (U.S. Patent No. 5,806,066, hereinafter referred to as GOLSHANI), filed on 26 March 1996, and issued on 8 September 1998, in further view of Wotring et al (U.S. Patent No. 6,853,997, hereinafter referred to as WOTRING), filed on 28 June 2001, and issued on 8 February 2005.

11. **As per independent claims 1, 53, 67, 75, 84, and 92** HOTTI, in combination with GOLSHANI and WOTRING, discloses:

A method of managing a virtual content repository (VCR) that represents a plurality of content repositories {See. HOTTI, col. 1, lines 45-54, wherein this reads over "'Database Catalogue" logically partitions a database . . . [wherein] each logical database is a catalogue and contains a complete, independent group of database objects. . . . This makes it possible, for example to create two or more replica databases into one physical database; and col. 1, lines 54-56, wherein this reads over "'Database Node' is a database catalogue, which has been defined to act as a master or replica and thus participates in a hierarchy of synchronized databases."}, the method comprising:

creating at least one content node for each of the plurality of content repositories and associating each content node with its own content schema {See HOTTI, Figure 9, Elements 921 a, b, and c; and col. 6, lines 52-66, wherein this reads over "[a]s part of the registration, the identification data, e.g. schema name, or the new application data node is sent to the configuration management master database node"}, wherein each of the plurality of content repositories includes content that is unique {See HOTTI, col. 6, lines 30-31, wherein this reads over "[t]he configuration management replicas may be full or partial copies} from content in the other content repositories;

creating a plurality of hierarchy nodes, wherein each hierarchy node is a container for one or more of the content nodes, and wherein each hierarchy node is also associated with its own schema {See HOTTI, col. 6, lines 17-29, wherein this reads over "the configuration management node 231 includes a configuration management application 234... and replicas 203 213, 223 of the configuration management mater are stored into database servers 201, 211, 221"};

organizing the content and hierarchy nodes into a hierarchy in the VCR {See HOTTI, Figure 9; and col. 9, lines 19-27, wherein this reads over "a hierarchic system where several database systems a, b, c have their respective schema management nodes"}, and for each hierarchy node comprising the substeps of:

associating the hierarchy node with an identifier that specifies its path location within the VCR {See WOTRING, col. 4, lines 7-19, wherein this reads over "identifying each of the plurality of elements by an entity path referencing all parent elements in the entity path"

and "[t]he step of defining a compound element may comprise defining an entity path, a database name, a database command, and database fields"};

associating the hierarchy node with at least one parent content node and one or more child content nodes {See HOTTI, col. 2, wherein this reads over "[a] schema is a representation of the structure of the database that illustrates what kind of data is stored in the database"; and col. 6, lines 17-29, wherein this reads over "the configuration management node 231 includes a configuration management application 234... and replicas 203 213, 223 of the configuration management mater are stored into database servers 201, 211, 221"}, and

applying the hierarchy node's schema to each of the child content nodes {See HOTTI, col. 7, lines 4-6, wherein this reads over "[n]ext the schema of the application master database node is created using the scripts that were downloaded to the new replica database node 310"};

creating a content node for each of the plurality of content repositories {See HOTTI, Figure 9, elements 921 a, b, and c};

storing the hierarchy and content nodes in the VCR {See HOTTI, Figure 2b; and col. 3, lines 28-31, wherein this reads over "[t]here is also a configuration management master 233 stored in the configuration management node, and replicas 203213, 223 of the configuration management master are stored into database servers 201, 211, 221 of the database system"}; and

presenting the plurality of content repositories associated with the VCR as a single content repository to an application program interface {See GOLSHANI, Abstract, wherein this reads over "[t]he schemas of two of the independent database systems are fetched from the subservient computer systems" and "create a virtual database residing in the host computer system satisfying the requirements of the global integrated schema"}, wherein each of the schemas remain associated with their respective nodes.

While HOTTI may fail to expressly disclose the limitation of "presenting the plurality of content repositories associated with the VCR as a single content repository to an application interface," GOLSHANI discloses that a virtual database may be created to encompass a plurality of independent database systems and their respective schemas. The combination of inventions disclosed in HOTTI and GOLSHANI would disclose an invention which would comprise of a method wherein a plurality of content repositories may be presented as a single content repository via a virtual content repository (VCR). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by GOLSHANI.

Additionally, while the combination of HOTTI and GOLSHANI may fail to disclose "an identifier that specifies its path location within the VCR," WOTRING discloses an invention wherein a hierarchical data entity such as a database node may be associated with an entity path which references all parent

elements in the entity path. The combination of inventions disclosed in HOTTI, GOLSHANI, and WOTRING would disclose an invention which would comprise of a method wherein a plurality of content repositories may be presented as a single content repository via a virtual content repository (VCR) and said content repositories identifier according to a path location within the VCR. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by GOLSHANI and WOTRING.

One of ordinary skill in the art would have been motivated to do this modification so that the content schemas and hierarchy schemas may be obtained to create a virtual content repository.

12. **As per dependent claims 4, 58, 70, 78, 88, and 96** HOTTI, in combination with GOLSHANI and WOTRING, discloses:

The method claim 1 further comprising:

integrating each one of the plurality of content repositories into the VCR by use of one or more of a VCR browser, a content node editor, a schema editor, and a property editor {See HOTTI, col. 7, lines 11-16, wherein this reads over "using the configuring management application"}.

13. **As per dependent claims 54, 85, and 93**, HOTTI, in combination with GOLSHANI and WOTRING, discloses:

The method of claim 53 further comprising:

associating each hierarchy node with its own hierarchy schema {See HOTTI, Figure 2a, Elements 233 and 203; col. 6, lines 20-24, wherein this reads over "replicas of the configuration management master are stored into database server 201, 211, 221 of the database system"; and col. 7, lines 20-26, wherein this reads over, "schema name of the new application database is sent to the configuration management master database node"}; and

associating each content node with its own content schema {See HOTTI, Figure 9, Elements 921 a, b, and c; and col. 6, lines 52-66, wherein this reads over "[a]s part of the registration, the identification data, e.g. schema name, or the new application data node is sent to the configuration management master database node"}.

14. **As per independent claim 62, 74, 82-83, 91, and 99**, HOTTI, in combination with GOLSHANI and WOTRING, discloses:

The method of claim 53 further comprising:

Searching for one of a hierarchy node and content node returning a selected node {See HOTTI, col. 7, lines 18-41, wherein this reads over "two new, empty database nodes are created to the database server where the application replica database will reside . . . and registered

with the configuration management master . . . . As part of the registration, the identification data . . . is sent; and col. 9, lines 38-42, wherein this reads over "the invention can be implemented to work in a telecommunication system, which is compliant with . . . TCP/IP"}; and

performing an operation on the selected node, the operation comprising one of

deleting the selected node,
changing the location of the selected node in the VCR,
reading the schema associated with the selected node, and
updating the schema associated with the selected node {See HOTTI, col. 3, lines 21-25, wherein this reads over "These synchronized schema/application configuration management replicas comprise scripts that are used for creating and/or updating the schemas of the database nodes and managing the configurations of applications that use the database node"}.

15. **Claims 2-3, 5-6, 29-30, 56-57, 59-60, 68-69, 71-72, 75, 77, 79-80, 86-87, 89-90, 94-95, and 97-98** are rejected under 35 U.S.C. 103(a) as being unpatentable over HOTTI, in view of GOLSHANI, and in further view of Wotring et al (U.S. Patent No. 6,665,677, hereinafter referred to as WOTRING), filed on October 2, 2000, and issued on December 16, 2003.

HOTTI teaches the limitations of claims 1, 3-4, 49, 53-54, 57-58, 62, 67, 69-70, 75, 77-78, 84-85, 87-88, 92-93, and 95-96 for the reasons stated above.

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the first and second schemas comprise one or more properties, wherein each property is an association between a name and at least one value (claims 2, 56, 68, 76, 86, and 94).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data (claims 3, 57, 69, 77, 87, and 95).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition (claims 5, 59, 71, 79, 89, and 97).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein a property definition can specify, for a property, property choices (claims 6, 60, 72, 80, 90, and 98).

16. **As per dependent claims 2, 56, 68, 76, 86, and 94,** HOTTI, in combination with GOLSHANI and WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the first and second schemas comprise one or more properties, wherein each property is an association between a name and at least one value {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the schema comprise properties which are associations between a name and a value. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating the association of names and values.

17. **As per dependent claims 3, 57, 69, 77, 87, and 95,** HOTTI, in combination with GOLSHANI and WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that the stored value be in the format of a text string, a number, an image, an audio/visual presentation, or binary data.

18. **As per dependent claims 5, 59, 71, 79, 89, and 97,** HOTTI, in combination with GOLSHANI and WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition, specifically logical categories into which data may be classified. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that certain properties be defined.

19. **As per dependent claims 6, 60, 72, 80, 90, and 98,** HOTTI, in combination with GOLSHANI and WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) where a property definition can specify property choices {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines . . . the attributes that belong to the individual logical categories"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the property definition can specify certain property choices, or attributes belonging to individual logical categories. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that certain property definitions be specified in further detail by property choices.

20. **Claims 49, 73, and 81** are rejected under 35 U.S.C. 103(a) as being unpatentable over HOTTI, in view of GOLSHANI, and in further view of Wotring et al (U.S. Patent No. 6,853,997, hereinafter referred to as WOTRING '997), filed on 28 June 2001, and issued on 8 February 2005

HOTTI teaches the limitations of claims 1, 3-4, 49, 53-54, 57-58, 62, 67, 69-70, 75, 77-78, 84-85, 87-88, 92-93, and 95-96 for the reasons stated above.

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the identifier is a path (claims 49, 73, and 81).

21. **As per dependent claims 49, 73, and 81**, HOTTI, in combination with GOLSHANI and WOTRING '997, discloses a method wherein the identifier is a path {See WOTRING '997, Figures 1 and 2}.

The combination of inventions disclosed in HOTTI and WOTRING '997 would disclose an invention which would comprise of a method wherein the identifier is a path indicating the location of the hierarchy node in the hierarchy (e.g. "Entity Path = '\Person\Physical Description'"}. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING '997.

One of ordinary skill in the art would have been motivated to do this modification so that the application may determine the location of each hierarchy node in the hierarchy.

Response to Arguments

22. Applicant's arguments filed 27 April 2009 have been fully considered but they are not persuasive.

a. Rejections under 35 U.S.C. 103

Applicant asserts the argument that the combination of Hotti and Golshani fail to disclose "a hierarchy node [which] is associated with at least one parent content node and one or more

child content nodes." See Amendment, page 16. The Examiner respectfully disagrees. It is noted that Hotti discloses a configuration management master node which is associated with an application master database node 202 and replica database nodes 212, 222. See Hotti, Figure 2a. Furthermore, the configuration management master node (i.e. a hierarchy node) is used to provide schema data to the application master database node 202 (i.e. a parent content node) which then disseminates said schema to replica database nodes (i.e. a plurality of child content nodes). Accordingly, it is noted that the combination of Hotti and Golshani would indeed disclose the recited feature of the present invention.

Secondly, Applicant asserts the argument that the combination of Hotti and Golshani fail to disclose that "each child content node can have at least two schemas applied to it: its own schema, and the hierarchy node's schema." See Amendment, page 16. The Examiner respectfully disagrees. It is noted that Hotti discloses that the replica database nodes (i.e. the child nodes) are provided an initial schema from the master database and the configuration management master. See Hotti, col. 7, lines 18-42. It is further noted that when a new revision of the master database schema is made, said revision is subsequently downloaded and propagated to the replica database nodes. See Hotti, col. 7, lines 43-67. Accordingly, it is noted that the combination of Hotti and Golshani would indeed disclose the recited feature of the present invention.

Lastly, Applicant asserts the argument that "Golshani does not appear to disclose or render obvious an identifier that specifies its path location within the VCR." See Amendment, page 16. Applicant's argument is moot in of the new grounds of rejection.

Accordingly, the rejections under 35 U.S.C. 103 are maintained.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL KIM whose telephone number is (571)272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony Mahmoudi/
Supervisory Patent Examiner, Art Unit 2169

Paul Kim
Examiner, Art Unit 2169
TECH Center 2100

/pk/